POWER SAVINGS IN DYNAMIC REGISTER FILE STRUCTURES

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ABSTRACT OF THE DISCLOSURE

In the Retirement Payload Array (RPA) of a microprocessor, the pointer advance signal "ADVANCE POINTER" from the Instruction Retirement Logic (IRL) of the Instruction Scheduling Unit (ISU) is utilized to provide conditional read RPA signals. Consequently, according to the invention, a read of the RPA is completed only if it is determined that the read word line being read in the current cycle is not the same read word line that was read in the previous cycle.

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